

## MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

## **NOTICE OF ACCEPTANCE (NOA)**

Commercial Innovations, Inc. 9105 Way Ave. Cleveland, OH 44105

#### **SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION:** Solar Brite Single Ply Roof Systems over Steel Decks.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

Stephan

This NOA consists of pages 1 through 31.

The submitted documentation was reviewed by Alex Tigera.



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## **ROOFING SYSTEM APPROVAL**

Category:RoofingSub-Category:Single PlyMaterial:KEEDeck Type:SteelMaximum Design Pressure-105 psf

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

<b>Product</b>	<b>Dimensions</b>	Test Specification	Product <u>Description</u>
Solar Brite EV, Solar Brite	Various	ASTM D 6754	KEE, polyester reinforced, single ply membrane
Solar Brite EVFB, Solar Brite FB	Various	ASTM D 6754	KEE, fleece-backed, polyester reinforced, single ply membrane
LA432 Bonding Adhesive		Proprietary	Two side "contact" bonding adhesive
LA432M Bonding Adhesive		Proprietary	Low VOC solvent based "contact" adhesive
FA561M Water Borne Adhesive		Proprietary	One side "substrate only" fleece back solvent based adhesive
FA636 Water Borne Adhesive		Proprietary	One side "substrate only" fleece backed water based adhesive
Millennium One Step <sup>TM</sup> Foamable Adhesive		Proprietary	Elastomeric, One step foamable adhesive
Tuff Trac	0.080" x 28" or 56" x 43' 1/4" x 24" x 48"	N/A	Vinyl walk way Vinyl protection pad



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## **APPROVED INSULATIONS:**

## TABLE 2

<b>Product Name</b>	<b>Product Description</b>	<u>Manufacturer</u> (With Current NOA)
ACFoam-II, ACFoam-IV	Isocyanurate Insulation	Atlas Roofing Corporation
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corporation
EnergyGuard Composite	Polyisocyanurate foam insulation with high density fiberboard or perlite insulation.	GAF Materials Corporation
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
Type X Gypsum	Gypsum Wallboard	Generic
Multi-Max-3, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
Thermaroof Composite-3	Polyisocyanurate/perlite composite insulation.	Rmax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum Coverboard	United States Gypsum Corporation
H-Shield	Polyisocyanurate insulation	Hunter Panels, LLC
ENRGY 3, ENRGY 3 25 PSI	Isocyanurate Insulation	Johns Manville Corporation
High Density Roof Fiberboard	Wood Fiber insulation board.	Generic
FiberTop E	Wood Fiber insulation board.	Firestone Building Products Company, LLC



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## **APPROVED FASTENERS:**

## TABLE 3

<u>Fastener</u> <u>Number</u>	<u>Product</u> <u>Name</u>	Product Description	<u>Dimensions</u>	Manufacturer (With Current NOA)
1.	Dekfast 14	Membrane fastener	Various	SFS Intec, Inc.
2.	Dekfast 15" x 2.5" Oval Barbed Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	SFS Intec, Inc.
3.	Dekfast Galvalume Steel Round 2-3/8 in 20-Ga. Barbed Plate	Barbed, galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.
4.	Dekfast Isofast IF-2.375- AT Membrane Plate	Galvalume AZ50 stress plate, #15 belted fasteners	2-3/8" Dia.	SFS Intec, Inc.
5.	Dekfast Fasteners, Dekfast Stress Plates	Insulation and membrane fasteners	Various	SFS Intec, Inc.
6.	Dekfast Galvalume Steel Hex	Galvalume AZ50 steel plate	2 7/8" x 3 <sup>1</sup> / <sub>4</sub> "	SFS Intec, Inc.
7.	OMG Heavy Duty	Self-drilling fastener for use in steel, wood or concrete decks	Various	OMG, Inc.
8.	OMG 3-in Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.
9.	OMG 3-in Ribbed Galvalume Plate	Galvalume coated steel plate	3" round	OMG, Inc.
10.	Dekfast 15 HS	Self-drilling, carbon fastener	Various	SFS Intec, Inc.
11.	OMG ASAP Fasteners	Preassembled fastener and plate	3" round	OMG, Inc.
12.	Flat Bottom Metal Plate	Aluminized steel plate	3" squre	OMG, Inc.
13.	OMG Standard Fasteners	Steel fastener for use in steel and wood decks	Various	OMG, Inc.
14.	Dekfast 1.5" x 2.75"Oval Barbed Plate	Oval stress plate	1.5" x 2.75"	SFS Intec, Inc.
15.	Trufast #21 SHD Fastener	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
16.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
17.	Trufast 2-3/4" Barbed Metal Seam Plate (EHD)	AZ-55 Galvalume steel stress plate	2.75" round	Altenloh, Brinck & Co. U.S., Inc.
18.	Dekfast Galvalume Steel 3" Round	Galvalume AZ50 stress plate	3" round	SFS Intec, Inc.
19.	Trufast #12 DP Fastener	Tru-Kote PC-3 coated, carbon steel fastener	Various	Altenloh, Brinck & Co. U.S., Inc.
20.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 stress plate	3.23" round	Altenloh, Brinck & Co. U.S., Inc.



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## **APPROVED FASTENERS:**

#### TABLE 3

<u>Fastener</u> <u>Number</u>	<u>Product</u> <u>Name</u>	<u>Product</u> <u>Description</u>	<b>Dimensions</b>	Manufacturer (With Current NOA)
21.	OMG 3-in Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.
22.	OMG 3-in Ribbed Galvalume Plate	Galvalume coated steel plate	3" round	OMG, Inc.
23.	OMG Standard Fasteners	CR-10 coated, carbon steel fastener	Various	OMG, Inc.
24.	Trufast #14 HD Fastener	Insulation fastener for steel and wood decks	Various	Altenloh, Brinck & Co. U.S., Inc.
25.	Accutrac Hextra	Carbon steel fastener	Various	OMG, Inc.
26.	Accutrac Flat Bottom	Galvalume steel plate	3" square	OMG, Inc.
27.	ASAP RoofGrip Pre- Assembled System	Pre-assembled system consisting of Roofgrip fasteners and plates	Various	OMG, Inc
28.	Trufast 2-3/4" Barbed Seam Plate (SHD)	AZ-55 Galvalume steel stress plate	2.75" round	Altenloh, Brinck & Co. U.S., Inc.



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## **EVIDENCE SUBMITTED:**

Test Agency/Identifier	<u>Name</u>	Report	<b>Date</b>
Factory Mutual Research Corp.	FMRC 4470	J.I. #1Z2A5.AM	01/12/96
•	Class 4470	J.I. 1Z3A8.AM	08/13/97
	Class 4470	30003251	10/15/99
	Class 4470	3006872	06/13/2000
	Class 4470	3009071	01/03/02
	Class 4470	3014050	07/08/03
	FM 4470	3038211	06/30/10
	FM 4470	3036192	11/23/09
	FM 4470	3028651	04/17/08
	FM 4470	3033396	09/04/09
	FM 4470	3030785	08/12/08
	FM 4470	3037168	04/12/10
	FM 4470	3037770	10/22/09
	FM 4470	3013125	09/23/03
	FM 4470	3013068	09/23/03
	FM 4470	3023458	07/18/06
	FM 4470	3026964	07/25/07
	FM 4470	3033314	08/26/08
	FM 4470	3003689	09/22/99
Underwriters Laboratories	UL 790	98NK12810	8/11/98
		98NK17212	8/21/98
Exterior Research & Design, LLC	TAS 114	4015.10.96-1-R1	07/20/10
	TAS 114	4006.07.97-1-R1	07/15/10
	TAS 114	4006.08.00-1-R1	10/18/05
	TAS 114	02843.02.05-08	02/04/05
	TAS 114/117	C12410.08.09	08/14/09
	TAS 117 & ASTM D6862	C850SC.11.07-R1	08/07/09
	FM 4470 / TAS 114	S32410.09.10	09/21/10
	ASTM D6754	S34070.06.11-R3	05/30/13
Trinity   ERD	ASTM D 6754	S34070.06.11-R1	06/18/12
PRI Construction Materials Technologies LLC	ASTM D 3747	HGC-142-02-03	02/09/12



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#### APPROVED ASSEMBLIES

**Membrane Type:** Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated **Deck Description:** Min. 18-22 ga. steel

**System Type B(1):** Base layer of insulation mechanically attached, top layer adhered; membrane adhered

#### All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, H-Shield, ENRGY 3, Multi-Max FA-3		
Minimum 1.5" thick	5 (#12) with 6	1:2 ft <sup>2</sup>
DensDeck, DensDeck Prime		
Minimum ¼" thick	5 (#12) with 6	1:2 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: Solar Brite roof cover adhered to the insulation with with FA636 Water Borne Adhesive at

0.66 to 0.71 gal/sq or with LA432M Bonding Adhesive applied to substrate and cover at 0.5

gal/sq. Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with FA636 Water

Borne Adhesive at 0.83 to 1 gal/sq.

**Maximum Design** 

**Pressure:** 

-45 psf (See General Limitation #9.)



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Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga. steel

System Type B(2): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	<u>Density/ft<sup>2</sup></u>
ACFoam-II, H-Shield, ENRGY 3		
Minimum 2" thick	1, 7 or 5 (#14)	$1:2.67 \text{ ft}^2$
Minimum 2" thick	1, 5 (#14) or 7	$1:1.33 \text{ ft}^2$

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	<b>Density/ft<sup>2</sup></b>
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 25 lbs/100 ft<sup>2</sup> or Olybond applied in a full coating application of 1gal/100 ft<sup>2</sup> or <sup>3</sup>/<sub>4</sub>" to 1" wide beads 12" o.c. of Olybond 500, Millennium One Step<sup>TM</sup> Foamable Insulation Adhesive or Insta-Stik Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Membrane:** Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal. Laps are

sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft²/gal or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design -45 psf (See General Limitation #9.)

Pressure: -60 psf (attached at 1 fastener per 1.33 ft<sup>2</sup>) (See General Limitation #7.)



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**Deck Type 2I**: Steel Decks, Insulated

**Deck Description:** 18-22 ga. steel

System Type B(3): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, Multi-Max FA-3, H-Shield		
Minimum 1.5" thick	1 or 5 (#14)	1:2 ft <sup>2</sup>
Minimum 2" thick	1 or 5 (#14)	1:4 ft <sup>2</sup>
DensDeck, DensDeck Prime		
Minimum 0.25" thick	1 or 5 (#14)	1:2 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer (Optional)	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-II, Multi-Max FA-3, H-Shield		
Minimum 1.5" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup> or in <sup>3</sup>/<sub>4</sub>" to 1" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft<sup>2</sup>. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime applied to the base or top insulation layer in a

full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or in <sup>3</sup>/<sub>4</sub>" to 1" wide beads 12" o.c. of Millennium One Step<sup>TM</sup> Foamable Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft<sup>2</sup> or Type X

Gypsum applied in <sup>3</sup>/<sub>4</sub>" to 1" wide beads of Insta-Stik Adhesive, 12" o.c.



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#### Membrane:

Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding Adhesive or LA432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 1 gal. per 100 ft<sup>2</sup> or FA636 Water

Borne Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

# Maximum Design Pressure:

-45 psf (for applications utilizing FleeceBacked membranes) (See General Limitation #9.) -60 psf (for 2" thick insulation attached at 1 fastener per 4 ft² with Solar Brite EV) (See General Limitation #9.)

-67.5 psf (for 1.5" thick insulation attached at 1 fastener per 2 ft<sup>2</sup> with Solar Brite EV) (See General Limitation #9.)



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Single Ply, KEE **Membrane Type:** 

Deck Type 2I: Steel Decks, Insulated **Deck Description:** Min. 18-22 ga. steel

**System Type C(1):** All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Base Insulation Layer (Optional)	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3		
Minimum 1.5" thick	N/A	N/A
<b>Top Insulation Layer</b>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	1 with 18, 5 (#12 or #14) with 6 or 18, 7 or 13 (#12) with 21, 19 or 24 with 20	1:2 ft <sup>2</sup>

Note: All layers shall be simultaneously fastened; see top or base layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Style80-M roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal. Laps are

sealed with 1.5-inch heat weld.

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA561M Water Borne Adhesive at 90 ft<sup>2</sup>/gal or FA636 Water Borne

Adhesive at 100 ft<sup>2</sup>/gal. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressures:** 

-45 psf (See General Limitation #9)



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Single Ply, KEE **Membrane Type:** 

Deck Type 2I: Steel Decks, Insulated

**Deck Description:** Min. 22 ga., Grade 80 steel attached to structural steel supports spaced max. 6 ft o.c. attached

with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps

secured with ITW Buildex Traxx/1 fasteners spaced max. 12" o.c.

All layers of insulation simultaneously attached; membrane adhered. System Type C(2):

All General and System Limitations apply.

One or more layers of the following.

**Base Insulation Layer Insulation Fasteners** Fastener Density/ft<sup>2</sup> (Table 3) **ACFoam-IV** (Flat or Tapered) Minimum 2.0" thick 1:1.3 ft<sup>2</sup> 13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27

Note: All layers shall be simultaneously fastened; see top or base layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal.

**Maximum Design** 

**Pressures:** 

-60.0 psf (See General Limitation #7)



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**Deck Type 2I:** Steel Decks, Insulated

**Deck Description:** Min. 22 ga., Grade 80 steel attached to structural steel supports spaced max. 6 ft o.c. attached

with ITW Buildex Traxx/5 fasteners and steel washers spaced max. 6 in. o.c. at each rib.

Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 12" o.c.

**System Type C(3):** All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply.

One or more layers of the following.

<b>Base Insulation Lay</b>	<u>⁄er</u>	<b>Insulation Fasteners</b>	<b>Fastener</b>
		<u>(Table 3)</u>	Density/ft <sup>2</sup>
ACFoam-IV (Flat o	r Tapered)		
Fastening #1:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22	$1:2.67 \text{ ft}^2$
		or 25 with 26 or 27	
Fastening #2:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22	1:2 ft <sup>2</sup>
		or 25 with 26 or 27	
Fastening #3:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22	1:1.3 ft <sup>2</sup>
		or 25 with 26 or 27	
Fastening #4:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22	1:1 ft <sup>2</sup>
		or 25 with 26 or 27	

Note: All layers shall be simultaneously fastened; see top or base layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA432 Bonding

Adhesive or LA432M Bonding Adhesive applied at an application rate of 50 ft<sup>2</sup>/gal.

**Maximum Design** -60.0 psf for Fastening #1 (See General Limitation #7)

**Pressures:** -75.0 psf for Fastening #2 (See General Limitation #7)

-120.0 psf for Fastening #3 (See General Limitation #7)

-172.5 psf for Fastening #4 (See General Limitation #7)



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 13 of 31 **Membrane Type:** Single Ply, Thermoplastic

**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 33 steel deck attached to structural steel supports spaced max. 6 ft

o.c. attached with ITW Buildex Traxx/5 fasteners spaced max, 6 in, o.c. at each rib. Deck

side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(1): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

**H-Shield** 

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Membrane:** Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation with Dekfast fasteners and Dekfast Galvalume Steel Round 2-3/8 in 20-Ga. Barbed Plates, spaced 6" o.c. within the 6" laps in rows spaced 95"

o.c. The side laps are sealed with a minimum 1.5" heat weld.

**Maximum Design** 

**Pressures:** 

-45.0 psf (See General Limitation #7)



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**Deck Type 2I:** Steel Decks, Insulated

**Deck Description:** 18-22 ga. Steel

System Type D(2): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> Density/ft <sup>2</sup>
ACFoam-II, H-Shield		
Minimum 1" thick	N/A	N/A
ENRGY 3, H-Shield		
Minimum 1.4" thick	N/A	N/A
Multi-Max-3, ACFoam Composite, EnergyGu	ard Composite, Thermaroof Composite-3	
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the preliminary fastened insulation

to the deck as specified below:

**Fastening #1:** Fasten with OMG ASAP fasteners spaced 18" o.c. through the 3.5" head laps or fastening

tabs spaced 48" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -45 psf (See General Limitation #9.)

**Fastening #2:** Fasten with OMG ASAP fasteners spaced 6" o.c. through the 3.5" head laps or fastening tabs

spaced 98" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -45 psf (See General Limitation #7.)

**Fastening #3:** Fasten with OMG ASAP fasteners spaced 6" o.c. through the top of the roof cover spaced at

maximum intervals of 9 feet. Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are sealed with 1.5-inch

heat weld.

Maximum Design Pressure: -52.5 psf (See General Limitation #7.)



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laps or fastening tabs spaced 53" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -52.5 psf (See General Limitation #7.)

**Maximum Design** 

**Pressures:** See Fastenings Options Above



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**Membrane Type:** Single Ply, Thermoplastic

**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 80 steel deck attached to structural steel supports spaced max. 6 ft

o.c. attached with 12-24 x 11/4 HWH Impax 45 fasteners spaced max. 6" o.c. at supports.

Deck side laps secured 24" o.c. with 14x7/8 HWH Lap-S/D fasteners.

System Type D(3): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

ACFoam-II

Minimum 1.0" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation as specified below.

**Fastening #1:** Deckfast 15 HS fasteners with Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 12" o.c.

within the 5" laps in rows spaced 95" o.c. The side laps are sealed with a minimum 1.5"

heat weld.

Maximum Design Pressure -45.0 psf. (See General Limitation #7)

**Fastening #2:** Deckfast 15 HS fasteners with Dekfast 1.5" x 2.75" Oval Barbed Plates spaced 6" o.c. within

the 5" laps in rows spaced 95" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressure -52.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 17 of 31 **Membrane Type:** Single Ply, Thermoplastic

**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga., steel deck attached to structural supports spaced max. 6 ft o.c. attached

with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps

secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(4): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation LayerInsulation FastenersFastener(Table 3)Density/ft²

**ENRGY 3** 

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Membrane:** Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation with Dekfast fasteners with Dekfast 1.5 x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75 Oval Barbed Plates, spaced 12" o.c. within the 5" laps in rows

spaced 69" o.c. The side laps are sealed with a minimum 1.5" heat weld.

**Maximum Design** 

**Pressures:** 

-45.0 psf (See General Limitation #7).



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 18 of 31 **Membrane Type:** Single Ply, Thermoplastic

Deck Type 2I: Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 80 steel deck attached to structural supports spaced max. 6 ft o.c.

> attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at supports (one fastener was installed at each bearing attachment). Deck side laps secured with ITW

Buildex Traxx/1 fasteners spaced max. 24" o.c.

Membrane mechanically attached over preliminary fastened insulation. System Type D(5):

All General and System Limitations apply.

Base Insulation Layer	<b>Insulation Fasteners</b>	<b>Fastener</b>
	<u>(Table 3)</u>	<b>Density/ft<sup>2</sup></b>
ENRGY 3, Multi-Max FA-3, H-Shield, ACFoam II		

Minimum 1.5" thick N/A N/A

**Insulation Fasteners Top Insulation Layer (Optional)** Fastener Density/ft<sup>2</sup> (Table 3)

DensDeck, DensDeck Prime

Minimum 1/4" thick N/A N/A

FiberTop E, High Density Roof Fiberboard

Minimum ½" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the Membrane:

preliminarily attached insulation as specified below.

Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plate (EHD) or Trufast #21 **Fastening:** 

> SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 12" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum

1.5" heat weld.

**Maximum Design** 

-45 psf. (See General Limitation #7)

**Pressures:** 



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**Membrane Type:** Single Ply, Thermoplastic

Steel, Insulated Deck Type 2I:

**Deck Description:** Minimum 22 ga., Grade 33, Type B steel deck attached to structural supports spaced max. 6

> ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at supports (one fastener was installed at each bearing attachment). Deck side laps secured with ITW

Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(6): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation Layer	<b>Insulation Fasteners</b>	<b>Fastener</b>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>

ENRGY 3, Multi-Max FA-3, H-Shield, ACFoam-II

Minimum 1.5" thick N/A N/A

<u>Top Insulation Layer (Optional)</u>	Insulation Fasteners	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>

DensDeck, DensDeck Prime

Minimum 1/4" thick N/A N/A

FiberTop E, High Density Roof Fiberboard

Minimum ½" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation as specified below.

**Fastening #1:** Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plate (EHD) or Trufast #21

SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 12" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum

1.5" heat weld.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plate (EHD) or Trufast #21 **Fastening #2:** 

> SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 6" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum

1.5" heat weld.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



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**Deck Type 2I:** Steel Decks, Insulated

**Deck Description:** Minimum 18 - 22 gage steel

System Type D(7): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

 Insulation Layer
 Insulation Fasteners
 Fastener

 (Table 3)
 Density/ft²

 Any approved polyisocyanurate Listed in Table 2
 N/A
 N/A

 Minimum 1.5" thick
 N/A
 N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Membrane:** Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as

specified below.

**Fastening #1:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. within the 5" open laps in rows spaced 144.0" o.c., or installed through integral 3-1/2"

fastening tab. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. through the top of the roof cover in rows spaced 144.0" o.c.. Rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of tab or both edges of cover strip are heat welded min. 1.5". The

outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #3:** Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or

Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. within the 5" open laps in rows spaced 72.0" o.c., or installed through integral 3-1/2"

fastening tab. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



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**Deck Type 2I**: Steel Decks, Insulated

**Deck Description:** Minimum 22 gage ASTM A 611 Grade E Type B Steel deck fastened to steel support at a

maximum span of 6' o.c. Steel deck shall be fastened with ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with Traxx/1 screws at a maximum

spacing of 30 inches o.c.

**System Type D(8):** Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	Density/ft <sup>2</sup>
Any approved polyisocyanurate Listed in Table 2		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) <sup>1</sup>/<sub>4</sub>" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as

specified below.

**Fastening #1:** Dekfast fasteners with plates spaced 18" o.c. within the 5" open laps in rows spaced 51" o.c.

The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners with plates spaced 12" o.c. in the 5" open laps in rows spaced 51" o.c. The

outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

**Fastening #3:** Fasten with Dekfast fasteners and plates spaced 6" o.c. through the top of the roof cover

spaced at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are

sealed with 1.5-inch heat weld.

Maximum Design Pressure: -75 psf. (See General Limitation #7)



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 22 of 31 **Fastening #4:** Dekfast fasteners with plates spaced 6" o.c. within the 5" closed laps in rows spaced 104.5"

o.c. The outside 1.5" of the laps is heat welded.

Maximum Design Pressure: -82.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



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**Deck Type 2I**: Steel Decks, Insulated

**Deck Description:** 18-22 ga. Steel (See Specific Deck type below)

System Type D(9): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft <sup>2</sup>
Any approved polyisocyanurate Listed in Table 2		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

**Fire Barrier:** (Optional) <sup>1</sup>/<sub>4</sub>" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as

specified below.

**Deck:** Minimum 22 gage ASTM A653 SS Grade 33 Type B Steel deck fastened to steel support at

a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec

1/4-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

**Fastening #1:** Dekfast fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 51"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 51"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

**Deck:** Minimum 22 gage ASTM A1008 SS Grade 80 Type B Steel deck fastened to steel support at

a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec

1/4-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

**Fastening #1:** Dekfast fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 72"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -45 psf. (See General Limitation #7)



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 24 of 31 **Fastening #2:** Dekfast fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 96"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #3:** Dekfast fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 51"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

**Deck:** Minimum 20 gage ASTM A653 SS Grade 33 Type B Steel deck fastened to steel support at

a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec

<sup>1</sup>/<sub>4</sub>-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

**Fastening #1:** Dekfast fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 51"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 51"

o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Fastening Options Above



NOA No.: 12-1102.05 Expiration Date: 01/05/16 Approval Date: 10/17/13 Page 25 of 31 **Membrane Type:** Single Ply, Thermoplastic

Deck Type 2I: Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 33 steel deck attached to structural steel supports spaced max. 6 ft

o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck

side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(10): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

**Insulation Fasteners Base Insulation Layer** Fastener (Table 3) Density/ft<sup>2</sup>

H-Shield

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the Membrane:

> preliminarily attached insulation using Dekfast fasteners with plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 6" laps in rows spaced 104.5" o.c. The side

laps are sealed with a minimum 1.5" heat weld.

**Maximum Design** 

Pressures: -60.0 psf (See General Limitation #7).



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**Membrane Type:** Single Ply, Thermoplastic

**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 33 steel deck attached to structural supports spaced max. 6 ft o.c.

attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side

laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(11): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation LayerInsulation Fasteners<br/>(Table 3)Fastener<br/>Density/ft²

**ENRGY 3** 

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Membrane:** Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation using Dekfast fasteners with plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 5" laps in rows spaced 69" o.c. The side laps

are sealed with a minimum 1.5" heat weld.

**Maximum Design** 

**Pressures:** -60.0 psf (See General Limitation #7).



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**Deck Type 2I**: Steel Decks, Insulated

**Deck Description:** Minimum 22 ga., type B, steel decking placed over minimum 0.25" thick structural supports

having maximum 5 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW

Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.

**System Type D(12):** Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	<b>Insulation Fasteners</b>	<u>Fastener</u>
	<u>(Table 3)</u>	<b>Density/ft<sup>2</sup></b>
Any approved polyisocyanurate Listed in Table 2		
Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the

deck using Dekfast fasteners and plates spaced 6" o.c. through the tabs spaced a maximum of

51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures:-75 psf (See General Limitation #7)

Or

Solar Brite TopSider system consisting of Solar Brite EV or Solar Brite attached using Dekfast fasteners and plates spaced 6" o.c. through the top of the membrane spaced at

intervals of 104.5". Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures:-90 psf (See General Limitation #7)

**Maximum Design** 

**Pressures:** 

See Membrane attachment above.



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**Deck Type 2I**: Steel Decks, Insulated

**Deck Description:** Minimum 22 ga., 1.5" deep, ASTM A611, Grade E or ASTM A446, Grade E steel decking

placed over minimum 0.25" thick structural supports having maximum 6 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a

maximum 30" o.c.

System Type D(13): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

 Insulation Layer
 Insulation Fasteners
 Fastener

 (Table 3)
 Density/ft²

Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Vapor Retarders:** (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base

layer of insulation.

Fire Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

**Membrane:** Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the

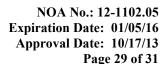
deck using Dekfast fasteners and plates spaced 12" o.c. through the tabs spaced a maximum

of 24" o.c. Laps are sealed with 1.5-inch heat weld.

**Maximum Design** 

**Pressures:** 

-82.5 psf (See General Limitation #7.)





**Membrane Type:** Single Ply, Thermoplastic

Deck Type 2I: Steel, Insulated

**Deck Description:** Minimum 22 ga., Grade 80 steel deck attached to structural steel supports spaced max. 6 ft

o.c. attached with ITW Buildex Traxx/5 fasteners spaced max, 6 in. o.c. at each rib. Deck

side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.

System Type D(14): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

**Base Insulation Layer Insulation Fasteners** Fastener (Table 3) Density/ft<sup>2</sup>

**H-Shield** 

Minimum 1.5" thick N/A N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the

preliminarily attached insulation as specified below.

Dekfast fasteners with plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. **Fastening #1:** 

within the 6" laps in rows spaced 94" o.c. The side laps are sealed with a minimum 1.5"

heat weld.

Maximum Design Pressure –82.5 psf. (See General Limitation #7)

**Fastening #2:** Dekfast fasteners with plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c.

within the 6" laps in rows spaced 47" o.c. The side laps are sealed with a minimum 1.5"

Maximum Design Pressure -112.5 psf. (See General Limitation #7)

**Maximum Design** 

Pressures:

See Fastening Options Above.



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#### STEEL DECK SYSTEM LIMITATIONS:

- 1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
- 2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

#### **GENERAL LIMITATIONS:**

- 1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
- 3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
- 4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.
- 5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
- 6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
- 7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
- 8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
- 9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
- 10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

#### END OF THIS ACCEPTANCE



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